

AMENDMENT UNDER 37 C.F.R. § 1.116
Application No.: 10/042,154
Atty Docket No.: Q62628

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

Claim 1. (currently amended): A polishing composition comprising at least (a) water, (b) alumina crystal and (c) a sol product,

wherein the sol product (c) is (i) a mixture of an aluminum salt with at least one species selected from the group consisting of sodium hydroxide, potassium hydroxide, ammonia, organic amine compounds, amine chelate compounds, aminocarboxylic acids, aminocarboxylic acid chelate compounds and aminophosphonic acid chelate compounds, or

wherein the sol product (c) is (ii) a mixture of at least one species selected from among hydrates and anhydrides of aluminum salts including inorganic acid aluminum salts that include aluminum sulfate, aluminum chloride, aluminum nitrate, aluminum phosphate and aluminum borate, and organic acid aluminum salts that include aluminum acetate, aluminum lactate and aluminum stearate with at least one species selected from among sodium hydroxide, potassium hydroxide, ammonia, organic amine compounds, amine chelate compounds, aminocarboxylic acids, aminocarboxylic acid chelate compounds and amino-phosphonic acid chelate compounds, and

wherein the sol product (c) is amorphous.

Claim 2. (original): A polishing composition according to claim 1, further comprising a polishing accelerator.

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Claim 3. (original): A polishing composition according to claim 2, wherein the polishing accelerator is at least one species selected from the group consisting of organic acids, inorganic acids and salts thereof.

Claim 4. (original): A polishing composition according to claim 1, wherein the sol product is a mixture of an aluminum salt with at least one species selected from the group consisting of sodium hydroxide, potassium hydroxide, ammonia, organic amine compounds, amine chelate compounds, aminocarboxylic acids, aminocarboxylic acid chelate compounds and aminophosphonic acid chelate compounds.

Claim 5. (original): A polishing composition according to claim 2, wherein the sol product is a mixture of an aluminum salt with at least one species selected from the group consisting of sodium hydroxide, potassium hydroxide, ammonia, organic amine compounds, amine chelate compounds, aminocarboxylic acids, aminocarboxylic acid chelate compounds and aminophosphonic acid chelate compounds.

Claim 6. (original): A polishing composition according to claim 1, wherein the sol product is a mixture of at least one species selected from among hydrates and anhydrides of aluminum salts including inorganic acid aluminum salts that include aluminum sulfate, aluminum chloride, aluminum nitrate, aluminum phosphate and aluminum borate, and organic acid aluminum salts that include aluminum acetate, aluminum lactate and aluminum stearate with at least one species selected from among sodium hydroxide, potassium hydroxide, ammonia, organic amine compounds, amine chelate compounds, aminocarboxylic acids, aminocarboxylic acid chelate compounds and amino-phosphonic acid chelate compounds.

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Claim 7. (original): A polishing composition according to claim 2, wherein the sol product is a mixture of at least one species selected from among hydrates and anhydrides of aluminum salts including inorganic acid aluminum salts that include aluminum sulfate, aluminum chloride, aluminum nitrate, aluminum phosphate and aluminum borate, and organic acid aluminum salts that include aluminum acetate, aluminum lactate and aluminum stearate with at least one species selected from among sodium hydroxide, potassium hydroxide, ammonia, organic amine compounds, amine chelate compounds, aminocarboxylic acids, aminocarboxylic acid chelate compounds and amino-phosphonic acid chelate compounds.

Claim 8. (original): A polishing composition according to claim 1, wherein the sol product is a mixture of at least one aluminum salt selected from the group consisting of aluminum sulfate, aluminum chloride and aluminum nitrate with at least one compound selected from the group consisting of sodium hydroxide, potassium hydroxide, ammonia, triethanolamine and aminotrimethylenephosphonic acid.

Claim 9. (original): A polishing composition according to claim 2, wherein the sol product is a mixture of at least one aluminum salt selected from the group consisting of aluminum sulfate, aluminum chloride and aluminum nitrate with at least one compound selected from the group consisting of sodium hydroxide, potassium hydroxide, ammonia, triethanolamine and aminotrimethylenephosphonic acid.

Claim 10. (original): A polishing composition according to claim 2, wherein the polishing accelerator is contained in an amount of 0.01-10 mass%.

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Claim 11. (original): A polishing composition according to claim 1, wherein the sol product is contained in an amount of 0.01-5 mass%.

Claim 12. (original): A polishing composition according to claim 2, wherein the sol product is contained in an amount of 0.01-5 mass%.

Claim 13. (withdrawn): A method of producing a sol product derived from an aluminum salt, which comprises mixing, by means of a stirrer, an aluminum salt with at least one species selected from the group consisting of sodium hydroxide, potassium hydroxide, ammonia, organic amine compounds, amine chelate compounds, aminocarboxylic acids, aminocarboxylic acid chelate compounds and aminophosphonic acid chelate compounds.

Claim 14. (withdrawn): A method of producing a sol product according to claim 13, wherein the aluminum salt is at least one species selected from the group consisting of aluminum sulfate, aluminum chloride and aluminum nitrate.

Claim 15. (withdrawn): A method of producing a sol product according to claim 13, wherein the stirrer is a high-shear stirrer.

Claim 16. (withdrawn): A method of producing a sol product according to claim 14, wherein the stirrer is a high-shear stirrer.

Claim 17. (withdrawn): A method of producing a magnetic recording disk substrate, which comprises rotating at least one of a magnetic recording disk raw substrate and a polishing pad while the polishing composition as recited in claim 1 is fed into a space between the substrate and the pad.

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Claim 18. (withdrawn): A method of producing a magnetic recording disk substrate, which comprises rotating at least one of a magnetic recording disk raw substrate and a polishing pad while the polishing composition as recited in claim 2 is fed into a space between the substrate and the pad.

Claim 19. (withdrawn): A method of producing a magnetic recording disk substrate according to claim 17, wherein the magnetic recording disk raw substrate is an aluminum magnetic recording disk substrate that is chemically plated with Ni-P.

Claim 20. (withdrawn): A method of producing a magnetic recording disk substrate according to claim 18, wherein the magnetic recording disk raw substrate is an aluminum magnetic recording disk substrate that is chemically plated with Ni-P.

Claim 21. (new): A polishing composition according to claim 1, wherein the alumina crystal has an average particle size of from 0.02 to 5 μm .